

11. (Amended) The method of claim 1, wherein said ratio is below approximately 1.2
12. (Amended) The method of claim 1, wherein said ratio is between about 1.0 and about 1.2.
14. (Amended) The method of claim 1, wherein the dielectric is deposited over said gaps at an etch-to-deposition ratio between about 0.0 and about -0.05.
15. (Amended) The method of claim 1, wherein the dielectric comprises silicon oxide.
16. (Amended) The method of claim 1, wherein the dielectric has a refractive index of about 1.46.
19. (Amended) A method for filling a gap during integrated circuit fabrication, comprising:
providing a gas mixture comprised of silicon-containing and oxygen-containing components;
selecting a flow rate of said silicon-containing component;
providing a minimum flow rate of said oxygen-containing component to allow formation of a film having a refractive index of about 1.46; and
filling said gap by depositing said film over said gap using said gas mixture for simultaneous high density plasma chemical vapor deposition and sputter etching.
30. (New) A method for filling gaps during integrated circuit fabrication, comprising:
providing a gas mixture comprised of oxygen-containing and silicon-containing components, said gas mixture having a ratio of said oxygen-containing component to said silicon-containing component below about 1.3; and
filling said gaps by using said gas mixture for simultaneous high density plasma chemical vapor deposition and sputter etching.

LAW OFFICES OF
MICHELSON KWOK CHEN
& HEID LLP

2402 MICHELSON DRIVE
SUITE 210
IRVINE, CA 92612
(949) 752-7040
FAX (949) 752-7049